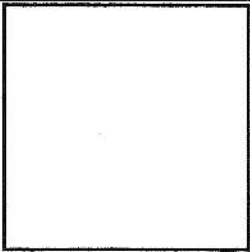
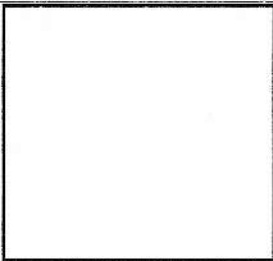
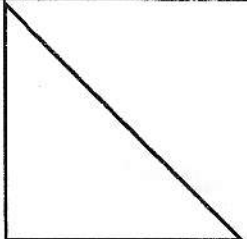
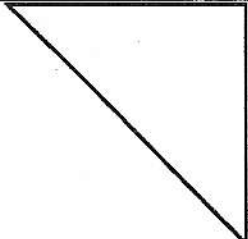


Area of a triangle

I am learning to find the area of a triangle.

Materials:

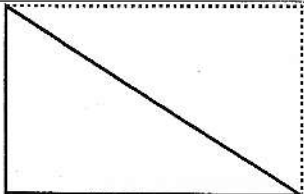
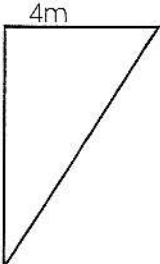
1) Complete the table below.

 <p>4m</p> <p style="text-align: center;">4m</p>	<p>a) What is the area of the square to the left?</p>	 <p>6m</p> <p style="text-align: center;">6m</p>	<p>c) What is the area of the square to the left?</p>
	<p>b) If half of the square was taken away what would be the area?</p>		<p>d) If half of the square was taken away, what would be the area?</p>

You have just proved that area of a triangle must be half the area of a rectangle with the same width and length.

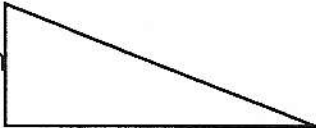
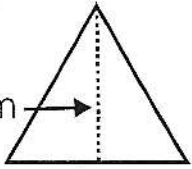
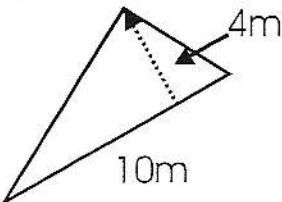
Imaging:

2)

 <p>4m</p> <p style="text-align: center;">5m</p>	<p>a) Imagine the triangle was actually part of a rectangle (see the dotted line). What would be the area of the rectangle?</p>	<p>b) What must be the area of the triangle?</p>
 <p>4m</p> <p>8m</p>	<p>c) Imagine the triangle was part of a rectangle, what would be the area of the rectangle?</p>	<p>d) What must be the area of the triangle?</p>

Extended mathematical thinking:

3) $\frac{1}{2}$ base \times height = the area of a triangle. Explain to your partner why this formula finds the area of a triangle. Then use the formula to work out the area of the triangles below.

<p>a)</p>  <p>4m</p> <p style="text-align: center;">12m</p>	<p>b)</p>  <p>6m</p> <p style="text-align: center;">6m</p>	<p>c)</p>  <p>4m</p> <p style="text-align: center;">10m</p>
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Area of more complex shapes

I am learning to find the area of more complex shapes.

Materials:

1) Find the total area of the shapes below.

<p>a) Area of block 1 = b) Area of block 2 = c) Total area =</p>	<p>d) Area of block 1 = e) Area of block 2 = f) Total area =</p>	<p>g) Area of block 1 = h) Area of block 2 = i) Total area =</p>

Imaging:

2) Find the total area of the shapes below.

<p>a) Total area of shape =</p>	<p>b) Total area of shape =</p>	<p>c) Total area of shape =</p>

Extended mathematical thinking:

3) Find the area of the shapes below.

<p>a) Total area of the shape =</p>	<p>b) Total area of the shape =</p>